

Work requester fills out this section.

Work Permit # DRL-2011-018 Work Order # ____ Job# ____ Activity# ____

| Requester: Don Lynch | Date: 7/20/11 | Ext.: 2253 | Dept/Div/Gro | oup: PO/PHENIX | | | | |
|---|--|---|---------------------------------------|--|---------------------------|--|--|--|
| Other Contact person (if different from | m requester): C. Biggs | | Ext.: 7515 | Ext.: 7515 | | | | |
| Work Control Coordinator: Don Lynd | ch | Start Date: 7/20/11 | Est. End Da | Est. End Date: 10/31/11 | | | | |
| Brief Description of Work: BBC North | h and South Repairs | | | | | | | |
| Building: 1008 | Room: IR | Equipment: PHENIX BBC | N&S Service Prov | Service Provider: PHENIX | | | | |
| CC, Requester/Designee, Service Pro | ovider, and ES&H (as necessary) fill | out this section or attach and | | | | | | |
| ES&H ANALYSIS | | | | | | | | |
| Radiation Concerns | None | Airborne | ☐ Contamination | Radiation | | | | |
| Radiation Generating Devices: | Radiography | Moisture Density Gauges | Soil Density Gauges | S X-ray Equipmen | t | | | |
| ☐ Special nuclear materials involv | ved, notify Isotope Special Materials Gro | oup | ☐ Fissionable mat | Fissionable materials involved, notify Laboratory Criticality Office | | | | |
| Safety Concerns | ☐ None | ☐ Ergonomics | ☐ Transport of Haz/Rad Material | | | | | |
| Adding/Demoving Walls or Deep | Confined Space* | ☐ Explosives | ☐ Lead* | ☐ Penetratin | ☐ Penetrating Fire Walls | | | |
| ☐ Adding/Removing Walls or Room | Corrosive | ☐ Flammable | ☐ Magnetic Field* | ☐ Pressurize | ☐ Pressurized Systems | | | |
| ☐ Asbestos* | ☐ Cryogenic | ☐ Fumes/Mist/Dust* | ☐ Material Handlin | ng 🔀 Rigging/Cr | ritical Lift | | | |
| ☐ Beryllium* | ☐ Electrical | ☐ Heat/Cold Stress | ☐ Noise* | ☐ Toxic Mate | ☐ Toxic Materials* | | | |
| ☐ Biohazard* | | ☐ Hydraulic | ☐ Non-ionizing Ra | adiation* | | | | |
| ☐ Chemicals* | ☐ Excavation | ☐ Lasers* | Oxygen Deficier | ncy* | | | | |
| * Does this work require medical cle | arance or surveillance from the Occupa | ational Medicine Clinic? Ye | es 🔼 No | | | | | |
| Environmental Concerns | | None Non | Work impacts Environmental Permit No. | | | | | |
| Atmospheric Discharges (rad/no | on-rad) | ☐ Land Use | Soil Activation/contamina | ation Waste-Mix | ☐ Waste-Mixed | | | |
| ☐ Chemical or Rad Material Stora | age or Use | ☐ Liquid Discharges | ☐ Waste-Clean | ☐ Waste-Rad | dioactive | | | |
| Cesspools (UIC) | | Oil/PCB Management | ☐ Waste-Hazardo | ous | gulated Medical | | | |
| ☐ High water/power consumption | | ☐ Spill potential | ☐ Waste-Industria | l ☐ Undergrou | ☐ Underground Duct/Piping | | | |
| Waste disposition by: | | | • | ☐ Other | | | | |
| Pollution Prevention (P2)/Waste M | Minimization Opportunity: | None ☐ Yes | | | | | | |
| FACILITY CONCERNS | | • | | | | | | |
| ☐ Access/Egress Limitations | ☐ Electrical Noise | ☐ Potential to Cause a I | alse Alarm | ☐ Vibrations | | | | |
| Access/Egress Elimitations | ☐ Impacts Facility Use Agre | eement | ☐ Temperature Ch | hange | | | | |
| ☐ Configuration Control | | | ☐ Utility Interruptions | | | | | |
| WORK CONTROLS | | | | | | | | |
| Work Practices | 1 | | | | | | | |
| None | Exhaust Ventilation | | ☐ Spill Containme | ent Security (s | see Instruction Sheet) | | | |
| ⊠ Back-up Person/Watch | ☐ HP Coverage | Posting/Warning Signs | ☐ Time Limitation | ☐ Other | ☐ Other | | | |
| ☐ Barricades | ☐ IH Survey | ☐ Scaffolding-requires inspection | ☐ Warning Alarm | Warning Alarm (i.e. "high level") | | | | |
| Protective Equipment | | | | | | | | |
| None | ☐ Ear Plugs | Gloves | ☐ Lab Coat | ☐ Safety Gla | | | | |
| ☐ Coveralls | ☐ Ear Muffs | Goggles | Respirator | | rness | | | |
| ☐ Disposable Clothing | ☐ Face Shield | ☐ Hard Hat | ☐ Shoe Covers | | ☐ Other | | | |
| Permits Required (Permits must be | | | | | | | | |
| None | Cutting/Welding | Impair Fire Protection | • | | | | | |
| Concrete/Masonry Penetration | ☐ Digging/Core Drilling | Rad Work Permit-RW | ⁹ No | | | | | |
| Confined Space Entry | ☐ Electrical Working Hot | Other | | | | | | |
| Dosimetry/Monitoring | | T = | T == | | | | | |
| None Non | ☐ Heat Stress Monitor | Real Time Monitor | ☐ TLD | | | | | |
| ☐ Air Effluent | ☐ Noise Survey/Dosimeter | Dosimeter | ☐ Waste Characte | ☐ Waste Characterization | | | | |
| ☐ Ground Water | O ₂ /Combustible Gas | Self-reading Digital Dosimeter | ☐ Other | ☐ Other | | | | |
| ☐ Liquid Effluent | ☐ Passive Vapor Monitor | Sorbent Tube/Filter Pump | | | | | | |
| Training Requirements (List below | | | | | | | | |
| PHENIX Awareness, LockOut/TagOut affected, Working at heights, man lift training | | | | | | | | |
| Based on analysis above, the Wal ratings below: | alysis above, the Walkdown Team determines the risk, complexity, and coordination (right): If using the permit when all hazard ratings are low, only the following need to sign: (Although allowed, there is no need to use back of form) | | | | | | | |
| ES&H Risk Level: | ☐ Low ☐ Moderate | High | WCC: | | Date: | | | |
| Complexity Level: | | | Service Provider: | | Date: | | | |
| Work Coordination: | | | Authorization to star | t | Date: | | | |
| | | <u> </u> | (Departmental Sup/\ | | | | | |

☐ Standing Work Permit

| | Work Plan (procedures, timing, eq Removal and re-installation of the r All other work is worker planned wo this effort has been performed perio continuously monitored by PHENIX which case efforts will be halted un | north and sout ork to be perfo odically during (lead technicia | h BBC's are to be perform rmed by appropriately train previous maintenance pe ans and cognizant enginee | ned in accordance of ned PHENIX technorisms without specter of er(s) for unexpecter of the specter of the spect | with PHENIX Con icians and BBC of al procedures an | collaboration experts. No sp d/or planning without any u | ecial traii nanticipa | ning or procedures are required as ted difficulties. Work will be | | | |
|--------|---|---|--|--|--|---|--------------------------|---|--|--|--|
| | Special Working Conditions Required: No | | | | | | | | | | |
| | Operational Limits Imposed: No | | | | | | | | | | |
| | Post Work Testing Required: No | | | | | | | | | | |
| | Job Safety Analysis Required: | Yes 🗵 No | | Walkdown Required: ☐ Yes ☒ No | | | | | | | |
| | Reviewed by: Primary Reviewer will determine the size of the review team and the other signatures required based on hazards and job complexity. Primary Reviewer's means that the hazards and risks that could impact ES&H have been identified and will be controlled according to BNL requirements. | | | | | | | | | | |
| | <u>Title</u> | | ame (print) Signature | | Life # | | <u>Date</u> | | | | |
| | Primary Reviewer | | | | | | | | | | |
| | ES&H Professional | | | | | | | | | | |
| | Other | | | | | | | | | | |
| | Other | | | | | | | | | | |
| | Work Control Coordinator | Don Ly | /nch | | | 20146 | | 1/20/06 | | | |
| | Service Provider | 50.1.2, | 11011 | | | 20110 | | 1120100 | | | |
| | OCIVICE I TOVIGEI | Poviou | v Done: in series | ☐ team | | | | | | | |
| | | Reviev | V Done. | Lean | | | | | | | |
| 1. Jol | site personnel fill out this section | | | | | | | | | | |
| | Note: Signature indicates personne | el performing v | work have read and under | stand the hazards | and permit requir | ements (including any attac | chments). | | | | |
| | Job Supervisor: | | | | Contractor Supervisor: | | | | | | |
| | Workers: | | Life#: | | Workers: | | Life#: | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | Workers are encouraged to provide | Vorkers are encouraged to provide feedback on ES&H concerns or on ideas for improved job work flow. Use feedback form or space below. | | | | | | | | | |
| | | ` t C | lin eta u/De ei eue e | | | | | | | | |
| . De | partmental Job Supervisor, Work C Conditions are appropriate to start v | | | controls are in plac | e and site is read | ty for job) | | | | | |
| | Name: | | | Life#: | | Date: | | | | | |
| | Name: | | Signature. | | LIIE#. | | Date. | | | | |
| i. De | partmental Job Supervisor, Work F Post Job Review (Fill in names of re | | signee determines if Pos | st Job Review is r | equired. 🗌 Ye | s 🗌 No | | | | | |
| | Name: | | Signature: | | Life#: | | Date: | | | | |
| | Name: | | Signature: | | Life#: | | Date: | | | | |
| | | | <u> </u> | | <u> </u> | | | | | | |
| . Wo | rker provides feedback. Worker Feedback (use attached sh | eets as neces | sary) | | | | | | | | |
| | Worker Feedback (use attached sheets as necessary) a) WCM/WCC: Is any feedback required? Yes No | | | | | | | | | | |
| | b) Workers: Are there better methods or safer ways to perform this job in the future? Yes No | | | | | | | | | | |
| | seout: Work Control Coordinator (up of work area to work superviso | | lept.) checks quality of c | completed permit | and ensures the | work site is left in an acc | eptable | condition. (WCC can delegate | | | |
| vuii | Name: | • , | Signature: | | Life#: | | Date: | | | | |
| | Comments: | | <u> </u> | | I | | 1 | | | | |